

A Model to Plan, Implement, and Evaluate Corporate Enhancement Programs

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Article:

Much of the health education literature in recent years has extolled the virtue of developing comprehensive corporate health enhancement programs. Various authors¹⁻⁵ have identified the benefits of such programs to include improved productivity, reduction of benefit costs, reduction of human resource development costs and the improved image of a corporation. Improved production can be manifested in reduced absenteeism, improved morale, improved ability to perform and the development of a higher quality staff. The reduction of benefit costs can be measured by a reduction of health care costs (or reduction in the rate of increase), lowered life insurance costs, and reduced worker's compensation claims. Cost benefits related to the reduction of human resource development costs can be seen in a decrease in costs for recruiting new employees and the monies saved by not having to train those new employees. The image of the corporate organization can be enhanced by the general visibility that a comprehensive health enhancement program provides and through the increased sense of concern for the employees.

Although it is possible to reap all the aforementioned benefits from a comprehensive health enhancement program, the program must be properly planned, implemented and evaluated. Those responsible for the development of such programs must use a systematic approach. To this end, this manuscript will outline a model which will help to increase the likelihood of success for comprehensive corporate health enhancement programs.

Corporate Motivation and Goals for Program Initiation

This stage in the model requires a careful assessment of the corporate motivation for offering the program, which should indicate the intended audience. The program planner must gather appropriate background information from top and middle level management, the corporate medical director, the employee relations department, labor unions (if applicable) and the work force to determine the reason(s) for initiation of a health promotion program.

Data gathered in this stage should provide the background information necessary to determine the direction a program might follow. For example, if the corporate director perceives the health promotion program as a vehicle to improve the image of the corporation then the types of programs which need to be developed are those that are highly visible (i.e., elaborate weight facilities, highly visible behavior change programs, in demand recreational programs, etc.) But, if the corporate director perceives the program as a vehicle to reduce health care cost, then the programs implemented should be those which would have the greater likelihood to enhance health status (i.e., smoking cessation, hypertension screening and control of the use of seat belts.) Conversely, if the program was part of a benefit package negotiated by a labor union, the emphasis may be on choosing the best services offered in programs at other worksites.

This stage also should help to provide background information on the health problems of employers for whom the program is intended. Such health problems may be the initial monetary factor for the development of a program. As a final step in this stage, the company should form a committee or task force to pursue the development of the program. This task force should ideally be made up of employees from all levels within the company. This committee can be of great value in designing a program so that failure is not built in.

Assessment of Current Health Status of Employees and Status of the Corporation and the Community

The second step in his hierarchy mandates a careful assessment of the health status of the employees. The complexity of this procedure ranges from the administration of a basic health risk appraisal to conducting more elaborate physical examinations, medical screening and endurance testing. Insurance utilization and claims data would be necessary if the goal of the program was to reduce any increase in insurance rates. These prospective health medical and insurance measures provide baseline data from which programs can be developed and the effectiveness of those programs assessed.

In this assessment phase, the program planner also needs to evaluate the corporate environment and community resources which may effect the success of a program. The corporate environment can be partitioned, for assessment, into two segments, physical and policy. In assessing the physical environment one would want to know what structural facilities there are for supporting various programs. For example, an onsite exercise program may not be feasible without appropriate exercise space and shower and locker facilities. Policy assessments may be done by observing services offered by the company as well as by collecting information on employees behaviors prescribed or proscribed by the employer. Examples of the former assessment would be to list medical services offered at the worksite or to determine the provisions of the employees health insurance package. Examples of the latter would be to determine company policies concerning vending machines, smoking on the job, or the use of seatbelts in company vehicles. A third consideration is the assessment of community resources. This would include information on both nonprofit and for profit agencies in the community that assist in the development, implementation, and evaluation of health promotion programs. The program planner would want information concerning services offered, types of personnel, types of educational materials (including audiovisual), and costs of services offered by the agencies. As a final part of this assessment, the planner must determine the level of financial support both the employer and employees are willing to contribute to the program.

Debriefing of Committee and All Employees

The results obtained in the previous steps must be forwarded to the planning committee and employees. This is a critical step in the development of a health promotion program. Passing this information to the planning committee allows them to begin generating possible alternative directions for program services and implementation. Debriefing of all employees provides information necessary to complete the next step in the planning process. One caveat must be offered at this point. In our experience, we have witnessed several companies that have assessed risk, passed on the information to the individual employees, and stopped at that point. This approach to the planning process is inappropriate and in some cases unethical. This practice increases anxiety in employees is counterproductive to controlling disease and promoting well-being.

Assessment of Employee Interests and Concerns

Once all employees are informed of the group and individual results from the previous screening steps, the program planner would next survey employee interests and concerns related to health. Although this step may be done earlier as part of Step 2, it makes more sense to first inform employees of their health status and risks since this information may change the manner in which they prioritize their interests and concerns. For example, it's possible that undiagnosed hypertensive employees may have no interest in hypertension information and control programs. However, once diagnosed through medical screening and information about hypertension related risk for disease is presented, hypertension may be a primary interest or concern. Assessment of interests and concerns is also needed to predict employee participation in various program segments. Employee interest can be used as an indirect measure of employee motivation to participate in program activities. Without this information, planned activities may have little or no attendance, regardless of the relative group of individual risks for disease.

Development of Formal Purpose and Goal Statements

Once steps one through four have been completed, the corporation needs to develop formal written statements of the purpose, goals, and objectives of the program. This task should be carried out by the planning committee.

These statements provide the parameters for the scope and nature of the program. From these statements the program planner can determine the employees for whom the program is designed.

Conduct A Preliminary Cost-Benefit Analysis

Some companies will want an estimate of potential costs and benefits to be realized from the health promotion program. Using data obtained through the above steps, the program planner can assess the potential for corporate cost savings. These data include but are not limited to 1) the number of employees, 2) the average employee salary, 3) health insurance premium, 4) average days absent per year, 5) turnover rate, 6) work days per year, 7) total corporate revenue, 8) recruitment cost and, 9) advertising costs. From these data, the program developer may be able to predict potential benefits from a health promotion program. For example, one percent increase in productivity in a corporation with total revenues of \$50 million per year will yield a potential savings of \$500,000 per year.

Predicting cost-benefit ratios for corporate health promotion programs is, at best, risky business. But, this procedure should tell the corporation if the possibility exists to save monies through health promotion and if not the corporation may need to pursue other cost containment avenues such as raising health insurance, copayments or premiums paid by employees. Some possible areas for analysis include health care costs, cost of absenteeism, possible effects of increased productivity benefits of a reduced turnover rate, and reduced recruitment costs.

Develop the Evaluation Plan

In this stage, the first action must be to answer the question, "Why evaluation?" The importance of this first question cannot be overemphasized since the answer to the question determines the type(s) of evaluation that will be carried out. For example, if the answer to the above question is that evaluation is needed to improve program activities over time, then process evaluation, including implementation assessment, program monitoring, contextual evaluation, and qualitative studies, is needed. On the other hand, if the answer to the above question is that evaluation will lead to decisions on expanding or ending the program, then impact or outcome evaluation is necessary. The answer to this question above will, in most instances, be given by the person (e.g. chief executive officer) or group (union) responsible for financing of the program. We hope it is clear from this discussion that it is possible to have multiple answers to the question and, hence, multiple types of evaluation.

In developing the evaluation plan, the program planner must determine not only what information to gather, but what constitutes a realistic time period for gathering meaningful information. To evaluate the impact of an educational program, one may only need to collect pre- and post-program information on the participants' knowledge and/or attitudes. However, if the evaluation is to focus on outcomes associated with insurance utilization, it may take several years to gather accurate data. (In relation to this point on insurance utilization, the program planner should caution all decision makers that early participation in the program is likely to be associated with increased utilization of insurance as previously undetected or ignored conditions are diagnosed and treated.) The focus of the evaluation, types of data to be collected, and time period needed for reasonable assessment will all be based on the goals and objectives specified in the previous stage.

Finally, in developing the evaluation plan, the program planner needs to consider the extent to which program impacts and outcomes must be tied to the program activities in a cause and effect relationship. This consideration will lead the planner to an appropriate evaluation design. Depending on the rigor of the design, the planner may discover factors not expressed in the goals and objectives that need to be measured or controlled. For instance, in a smoking cessation activity the planner may need to measure or control for the number of years a participant has smoked, whether or not peers or spouses smoke, a person's social support for cessation, and so on. Although control of many factors can be achieved random assignment of participants to groups, this is normally not practical nor desired in worksite settings. Therefore, it becomes paramount that in less rigorous designs where cause and effect inferences are desired, the planner measures as many confounding factors as reason dictates.

Development of a Health Promotion Program Based on Corporate Goals and Assessed Health Problems or Concerns

Based on the needs assessment and corporate goals, the health promotion program can take many directions. A corporate program could include information sharing programs, evaluation screening programs, prescription programs based on screening, health education programs, and individualized counseling programs. The amount of money and the expected outcomes for the program will often determine the type of program to be implemented. An information sharing program is going to be less expensive than a health education or individualized counseling program. But, a quality health education and counseling change program is likely to result in more significant and lasting changes in health behaviors of employees.

Also, the needs of the corporation and workers will also determine the type of program components to be included in the program. Such components include a variety of wellness/lifestyle activities, screening and monitoring activities, safety and accident prevention activities and employee assistance program activities. Lifestyle/wellness activities include such things as physical fitness, nutrition, weight control, smoking cessation and stress management programs. Screening and monitoring activities could include programs designed to detect high blood pressure, glaucoma, diabetes, colo-rectal cancer and sickle cell anemia. Screening programs must include follow-up and educational components to be complete. Safety and accident prevention programs can include on-the-job safety instruction, home safety and accident prevention, emergency care and CPR techniques, lifting techniques and seat belt usage. Employee assistance activities might include programs to deal with alcohol and drug problems, family problems, marital problems, financial-legal problems and other counseling related problems.

Again, it should be emphasized that the type of programs to be implemented should be based on the corporate needs assessment and the needs and interests of the employees.

A variety of methods have been used to implement a corporated health promotion program. These include the pilot approach, the phase-in approach and the total implementation approach. The pilot approach offers the corporation the benefit of pilot testing various program components on small segments of the employee population before making a decision to implement a program for the entire work force. The phased-in approach requires corporations to develop a systematic plan to implement various components of the program across time. The total implementation technique is obvious. Suffice to say that there are distinct risks and benefits associated with each method of implementation.

The implementation plan should also include the identification of the design for research and evaluation protocol. This will ensure that the appropriate data is collected at the correct intervals. Historically the evaluation of corporate health promotion programs has suffered for incomplete data. The inclusion of evaluative protocol in the implementation phase should help to minimize this problem.

Process Evaluation of the Program

Process evaluation is concerned with examining the operating procedures and the structure and process associated with the corporate health promotion program. In a process evaluation some things to examine include the number of employees who attend the program, the attitude of employees toward program offerings, the suitability of facilities to employee needs, the suitability of program timing to employee needs and the extent to which to program plan was followed in implementation.

The process evaluation process should suggest ways to improve the design and operation of the program. These data will help the program planner determine if the program failure is a function of the program or the administration and process used to implement the program.

Impact Evaluation

An important intermediate step in the evaluation of a corporate health promotion program is the assessment of changes in the knowledge, skills and attitudes of employees related to the program goals and objectives. These

measures will provide fairly immediate indications that the program has had a positive impact on the participants. Providing program participants with the knowledge, skills and attitudes conducive to positive behavior acquisition will not guarantee the adoption of the prescribe health behavior. But, will indicate whether participating workers are more likely to adopt healthy behaviors when compared to non-participant. These data can be most useful to justify the value of a program when other behavioral and cost effective data is not available.

Another function of collecting this data is to assess unintended program effects, such, as changes in behaviors of non-participants. For example, a smoking cessation program may result in reductions in smoking by non-participants due to several influences brought about by changes in the smoking behaviors of participants (e.g. less social support for smoking during the work day).

Data collection in this evaluation phase may take many forms including self report, observation, and physiological measures. Self report may be used is to determine a change in health behaviors and is much less costly and time consuming when compared to observational and other unobtrusive measures. In addition, self-report data should be collected identifying those who in-tend to change behavior in the future and the behavior change intent of non-participants. Self-report data of non-participants is often overlooked. The effect of a health promotion program often extends beyond the participant to include co-workers who can't at-tend the program and to the participant's family.

Observation is often a time consuming and costly method of collecting data concerning the effectiveness of a program. The best use of observation is probably when it can be integrated into the daily work routine. For example, after a safety program all supervisors could be instructed to observe the safety behaviors of employees and record or rate these behaviors. It should be quite evident that observation of employees away from the worksite would be expensive, burdensome, and possibly objected to by employees on ethical grounds.

A final type of measure that may be employed in worksite programs is physiological. Physiological measures are appropriate for exercise, nutrition, smoking cessation, and stress management programs. These measures not only provide information for program evaluation, but also may have an effect on stimulating participant motivation to maintain behavior change or remain with the program. Another important aspect of physiological measures is their increased reliability over other types of measures, such as self report. This better reliability may again effect the evaluation outcome. For example, in smoking cessation evaluations those using physiological measures generally indicated less program success than those using self report measures of smoking behavior. Finally, physiological measures may be used to validate other measures, such as self report, by using the physiological measures on an intermittent basis (random may be best) to confirm the other measures.

As a last note, in planning an impact evaluation, the program planner must choose the appropriate evaluation design to supply the information which will be acceptable for determining the worth, continuance, or changes needed in the program. It is important to note that the design chosen may have an effect on the evaluation outcome since more stringently designed worksite evaluations have demonstrated less program effectiveness. However, this is not intended to lead one to choose less stringent designs but rather to help one understand and be critical of other evaluation reports, and to highlight the need for better designed evaluations of worksite programs.

Outcome Evaluation

The second stage of the hierarchy called for an examination of the health status of the employees, an assessment of the potential for environmental support by the corporation and the identification of community support programs. This stage of the hierarchy calls for a re-evaluation of all these factors. These comparative data will provide concrete evidence of the impact of the program on the health of employees and the ability of the corporation and community to support health promotion programs. It must be clear that many of the

measures needed for evaluating the outcomes of a program may take years to produce. As an example, an attempt to reduce the incidence of heart disease in a work force will take years to evaluate since heart disease is predominantly a disease of older adults. The number of years it will take for any one company to evaluate this particular outcome is quite dependent on the age of present employees, with "younger companies" requiring more years.

The program planner must be prepared to encounter several problems in conducting outcome evaluations. First, there is the problem of workers leaving the company and new workers being hired. There must be a plan to deal with the loss of data from workers who leave as well as a plan for incorporating the data obtained from employees who joined the company after the program began. Secondly, if outcomes are linked to insurance utilization rates, there may be a problem in getting information from the insurance carrier in the form needed for the evaluation. However, most carriers will supply the needed information. Another problem associated with insurance data is the utilization by the employee's family. Although employees may reduce their utilization rates, family members may increase theirs and no net reduction in claims results. This is important if cost containment is a planned program outcome. The program planner must conceptualize the importance of the family to success of the program and must decide to what extent the family needs to be included in program activities. Fourth, the planner should be aware of the possibility of decreasing program effectiveness over time and should not get too excited over early program success (as evidenced by impact evaluations). The reason for this caution is due to the possibility of programs attracting motivated, low risk individuals into the initial activities. Program success with these individuals may not significantly effect outcomes of reduced absenteeism, early mortality, or decreased insurance costs. For example, worksite smoking cessation programs generally attract the least heavy smokers and therefore may only have a minimal impact on long term costly outcomes such as heart disease or cancer rates. Finally, the program planner is often asked to do a cost/benefit analysis as a part of the outcome evaluation. Many problems can occur in doing this type of analysis when determining the benefit (in terms of dollars) of outcomes such as reduced stress levels reported by employees or improved corporate image. Lastly, it must be recognized that cost/benefit analyses are often tied to an assumption that factors such as absenteeism, employee turnover, productivity, and rising insurance costs are somehow linked to specific behaviors related to risk of disease. This assumption might not be true.

It is evident from the preceding discussion that worksite health promotion programs face many obstacles in their planning, implementation, and evaluation. The model described in this paper is intended to systematically aid the program planner and to increase the likelihood of program success.

Notes

Steps to Plan, Implement and Evaluate Corporate Health Enhancement Programs

- I. Corporate Motivation and Goals
- II. Current Health Status of Employees, Corporation and Community
- III. Debriefing of Committee and Employees
- IV. Employee Interests and Concerns
- V. Formal Purpose and Goals Statements
- VI. Preliminary Cost-benefit Analysis
- VII. Evaluation Plan
- VIII. Health Enhancement Program
- IX. Process Evaluation

X. Impact Evaluation XI. Outcome Evaluation

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